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### REMARKS

This response is intended as a full and complete response to the final Office Action mailed September 8, 2005. In the Office Action, the Examiner notes that claims 1-14 are pending of which claims 1, 2, 5, 8, 9, and 12 are rejected and claims 3, 4, 6, 7, 10, 11, 13, and 14 are objected to as being dependent upon a rejected base claim. By this response, Applicants have herein amended claims 1-14. No new matter has been entered.

In view of both the amendments presented above and the following discussion, Applicants submit that none of the claims now pending in the application are anticipated under the provisions of 35 U.S.C. §102.

It is to be understood that Applicants, by amending the claims, do not acquiesce to the Examiner's characterizations of the art of record or to Applicants' subject matter recited in the pending claims. Further, Applicants are not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant responsive amendments.

### REJECTION UNDER 35 U.S.C. §102

#### A. Claims 1, 2, 5, 8, 9 and 12

The Examiner has rejected claims 1, 2, 5, 8, 9, and 12 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,665,495 B1 by Miles et al. (hereinafter "Miles"). Applicants respectfully traverse the rejection.

In general, Miles teaches a system and method for providing non-blocking routing of optical data through a telecommunications router in which ingress edge units receive the optical data packets from data links and aggregate the optical data packets into "super packets". In particular, Miles teaches an ingress super packet processor that classifies incoming data packets, queues the classified data packets in classification queues, constructs partial super packets, constructs super packets from the partial super packets, and sends the super packets to an egress edge unit for transmission towards a downstream node. (Miles, Abstract).

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Miles, however, does not teach each and every element of Applicants' invention as recited in independent claim 1. Namely, Miles fails to teach, show, or suggest at least the limitations of "wherein the concatenated packet comprises a common header, a content information part of each of the  $n$  received packets, and a payload of each of the  $n$  received packets" and "wherein the  $n$  received packets have a common traffic characteristic and  $n$  is determined based on the common traffic characteristic and at least one packet characteristic, the at least one packet characteristic comprising at least one of a size of the content information part of each of the  $n$  received packets, a size of the payload of each of the  $n$  received packets, or a size of the common header," as taught in Applicants' invention of at least claim 1. Specifically, Applicants' claim 1 positively recites:

A method for concatenating packets to be transmitted from a first node to a second node, the method comprising the steps of:

(a) receiving packets having at least one traffic characteristic from at least one input port;

(b) concatenating  $n$  received packets to form a concatenated packet, wherein the concatenated packet comprises a common header, a content information part of each of the  $n$  received packets, and a payload of each of the  $n$  received packets; and

(c) transmitting the concatenated packet from the first node to the second node, wherein the  $n$  received packets have a common traffic characteristic and  $n$  is determined based on the common traffic characteristic and at least one packet characteristic, the at least one packet characteristic comprising at least one of a size of the content information part of each of the  $n$  received packets, a size of the payload of each of the  $n$  received packets, or a size of the common header.

(Emphasis added.)

In Applicants' invention of at least claim 1, packets are concatenated to form a concatenated packet. Specifically,  $n$  received packets are concatenated to form the concatenated packet. As taught in Applicants' invention of at least claim 1, the concatenated packet includes a common header, as well as the respective content information and payload parts of each of the  $n$  received packets. Furthermore, the size of the concatenated packet in terms of the number of received packets used to form the concatenated packet (i.e., the number  $n$  of received packets concatenated to form the concatenated packet) is determined based on the common traffic characteristic and at least one packet characteristic. The at least one packet characteristic includes at least

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one of the size of the content information part of each of the  $n$  received packets, the size of the payload of each of the  $n$  received packets, or the size of the common header.

By contrast, with respect to establishment of partial super packets, Miles merely teaches that the sizes of the partial super packets are established according to queue size. In particular, Miles states that "partial super packets will be extracted from the packet classification queue 114 in a manner that best avoids overflow of the packet classification queue 114 and the super packet ingress queue 124." (Miles, Col. 21, Lines 6-9). As such, extracting partial super packets in order to prevent queue overflow results in partial super packets having sizes established according to the sizes of the associated queues from which the partial super packets are extracted. In other words, Miles does not determine partial super packet size prior to building the partial super packets (i.e., Miles does not process information prior to building the partial super packet that determines the final size of the partial super packet). Rather, Miles establishes partial super packet size by the action of extracting the partial super packet from a queue in a manner that prevents that queue from overflowing.

As such, the partial super packet queue size is established by the size of the packet classification queue in which the partial super packet is constructed. In other words, in constructing a partial super packet, Miles is completely unconcerned with constructing a partial super packet of a predetermined size, much less constructing a partial super packet of a predetermined size where the predetermined size is based on at least one packet characteristic. In fact, Miles is completely unconcerned with any characteristics of the data from which the partial super packet is constructed or any information that is shared by the data in the partial super packet, much less any size characteristics of the data from which the partial super packet is constructed. Rather, in constructing a partial super packet, Miles is concerned solely with queue management for preventing queue overflow.

Therefore, a concatenated packet size established according to the size of the queue in which the concatenated packet is formed, as taught in Miles, is simply not concatenation of  $n$  received packets where  $n$  is determined based on a common traffic characteristic and at least one packet characteristic, as taught in Applicants' invention of at least claim 1. Furthermore, Miles is completely devoid of any teaching or suggestion of

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any of the packet characteristics such as the size of the content information part of each of the  $n$  received packets, the size of the payload of each of the  $n$  received packets, or the size of the common header of the concatenated packet, as taught in Applicants' invention of at least claim 1.

Furthermore, with respect to construction of a super packet from the partial super packets, Miles merely teaches that the super packet is constructed by combining partial super packets formed in any of the rows of queues. In particular, Miles teaches that "[i]n order to build and transmit a super packet, the super packet transmit controller 126 will collect all of the E1 partial super packet data in row number one...into a single super packet that can contain data intended for egress edge unit #1 over any of the sixteen lambdas...." (Miles, Col. 22, Lines 7-18). In other words, Miles merely teaches that construction of a super packet depends on the configuration of the queues in which partial super packets are formed since all partial super packet data in a particular row is combined to form a super packet.

As such, Miles is completely devoid of any teaching or suggestion of "concatenating  $n$  received packets to form a concatenated packet, wherein the concatenated packet comprises a common header, a content information part of each of the  $n$  received packets, and a payload of each of the  $n$  received packets and transmitting the concatenated packet from the first node to the second node wherein the  $n$  received packets have a common traffic characteristic and  $n$  is determined based on the common traffic characteristic and at least one packet characteristic, the at least one packet characteristic comprising at least one of a size of the content information part of each of the  $n$  received packets, a size of the payload of each of the  $n$  received packets, or a size of the common header.

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added). The Miles reference fails to disclose each and every element of the claimed invention, as arranged in the claim.

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Therefore, for the reasons discussed above, Miles fails to teach, show, or suggest each and every element of Applicants' invention of at least independent claim 1. As such, Applicants submit that independent claim 1 is allowable under 35 U.S.C. §102. Similarly, independent claim 8 recites relevant features similar to the features recited in independent claim 1. As such, Applicants submit that independent claim 8 is also not anticipated by the teachings of Miles and, as such, fully satisfies the requirements of 35 U.S.C. §102 and is patentable thereunder.

As such, Applicants submit that independent claims 1 and 8 are allowable under 35 U.S.C. §102. Furthermore, dependent claims 2, 5, 9, and 12 depend, either directly or indirectly, from independent claims 1 and 8 and recite additional limitations therefor. Thus, and for at least the same reasons discussed above with respect to claims 1 and 8, Applicants submit that these dependent claims are also not anticipated by Miles and are allowable under 35 U.S.C. §102. Therefore, Applicants respectfully request that the rejection be withdrawn.

#### **ALLOWABLE SUBJECT MATTER**

Claims 3, 4, 6, 7, 10, 11, 13, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants thank the Examiner for indicating allowable subject matter with respect to these claims but believe that, for at least the reasons discussed above, independent claims 1 and 8 are allowable over the prior art of record. Thus, Applicants respectfully request that the Examiner's objection to claims 3, 4, 6, 7, 10, 11, 13, and 14 be withdrawn.

#### **SECONDARY REFERENCES**

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to Applicants' disclosure than the primary references cited in the Office Action. Therefore, Applicants believe that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

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### CONCLUSION

Applicants submit that claims 1-14 are in condition for allowance. Accordingly, reconsideration and allowance are respectfully solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Michael Bentley at (732) 383-1434 or Mr. Eamon J. Wall, Esq. at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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